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AN ANNIVERSARY AND ITS SUGGESTIONS.

On the 18th of February, 1791, Vial de St. Bel was appointed the first professor at "the Veterinary College, London." Yesterday may, therefore, be called the 125th Anniversary of what is now the Royal Veterinary College, Camden Town. We all know its history and its great development since its early days; but it may be remarked that very much of that development is the work of the last of its five quarters of a century of existence. Many of us can remember what the school was at its centenary in 1891; those who do, best know how greatly it has since increased in efficiency.

Perhaps even veterinary surgeons do not always realise—and the general public certainly does not—how comparatively recent a growth veterinary science is. Most of the European veterinary schools are far younger than the London one; and the senior one—at Lyon, is scarcely thirty years older. For many years there were very few such institutions in Europe; and the first veterinary schools and their earliest graduates laboured under a further great disadvantage. They were not concerned with an activity that had arisen suddenly, such as telegraphy, or railway engineering; they were trying to develop into a science a craft which had been practised empirically from the earliest times, for the most part by uneducated men. The fact that veterinary work had chiefly been done by uneducated men was a great difficulty at first. It was hard to get men of education to train as veterinarians; it was harder still to obtain recognition for them when trained. It is not surprising that, in England, veterinary surgery was not legally recognised as a profession till more than fifty years after the foundation of the London school, that our members seldom were socially recognised as professional men till many years after that, or that veterinary science, as a whole, did not reach the standards of the medical profession till comparatively recently. The two professions stand equal now in most respects; but they have only become so well within the last fifty years. For a hundred years before that all that could be done was to make our later advances possible.

When we feel dissatisfied with our position compared with that of the medical and legal professions, we should do well to compare our brief history with their much longer ones. The truth is that it would be difficult to find a body of men who have made such progress, against such odds, in so comparatively short a time as the veterinary profession. So much has been accomplished in a few generations, and so large a proportion of it within the last generation, that we may be confident of our ability to make the few steps that remain for us.

NAVICULAR DISEASE IN A THREE-YEAR-OLD COLT.

By HENRY TAYLOR, F.R.C.V.S., Haywards Heath.

In October, 1913, a three-year-old colt, whilst being broken in to harness, one day fell lame somewhat suddenly. He was a pony about 13.2, and his sire was a hackney, and his dam a polo pony, both sound as far as is known. One naturally expected to find the lameness due to splints but, after very careful observation and digital examination, that was negatived, and the seat of the trouble located in the region of the coronet. For this he was blistered around the coronet and became *almost* sound in about two months. He was not worked again until the late summer of 1914, when he very soon became too lame for use, the same leg being implicated.

In October, 1914, he had commenced to point the affected foot, and as he was quite useless in this condition he was unnerved. He became quite sound and worked for nearly one year, *viz.*, until Sept., 1915, when the lameness recurred.

On examination this was found to be due to the growing together of the ends of the divided nerve of one side of the limb, the pony being quite sensitive to the prick of a pin on that side, and not at all on the other, though on the latter a small neuroma had developed. At this period the affected foot had become smaller than its fellow, narrow at the heels and more upright, moreover, it felt quite hot. He was again unnerved on that side, but as he did not get sound in the course of a few weeks and as sensation was appearing on the opposite side, he was operated on for that also.

He is reported now as having as good action as ever he had, and he goes practically sound again. The site of the neuroma is marked by a subcutaneous thickening, and apparently there are some adhesions.

One does not generally find navicular disease in a three-year-old animal, particularly when the parents are sound, but that the lameness was due to anything but navicular disease in the above case seems extremely doubtful. The case was interesting in one respect—that was for the beautiful way in which the operation wounds healed; on two occasions the legs were covered with dirt because he would not allow them to be clipped and dressed before being cast, so after being clipped and brushed when down for the operation, they were simply painted with tincture of iodine and the incisions then made.

ABSTRACTS FROM FOREIGN JOURNALS.

Electricity as a cause of "Sleepy Staggers."

Reinhard Oeller, of Straubing, has recorded the following unusual case.

The subject was a seven-year-old gelding, which had always been lively and shown good appetite. At the beginning of the winter months, this animal attracted attention by peculiarities in feeding, which he only displayed at the morning and evening meals, when the electric light was burning in the stable. Sometimes just at the beginning of the meal, sometimes during its course, he threw his head high in the air without visible cause, then trembled repeatedly, and held the food just taken for some time in his mouth without masticating it. He did not begin eating again till some time afterwards. Often this performance was repeated at very short intervals, and in that case the horse then remained for a minute or so standing with his head sunken, and his eyes fixedly directed into a dark corner.

The owner suspected disease of the teeth, but an examination of these gave negative results. The symptoms therefore appeared to be due to a bad habit or trick.

In the course of the next summer, when the feeding generally took place without artificial light, the greater part of the symptoms disappeared; but with the beginning of autumn they recommenced afresh, and still more violently. The horse now trembled when at liberty, very often showed shaking of the head while at work, and also showed other symptoms indicative of a commencement of "sleepy staggers." The peculiar behaviour whilst eating and the sudden standing back from the bars now became very marked.

One day while the attendant was feeding the horse, he accidentally touched one of the iron bars with his hand, and received a fairly severe electric shock from it. This led to investigation—and elucidation of the cause of the horse's condition. A long time before, the main current of the electric lighting apparatus which supplied all the lamps of the large establishment had been laid in the wall. A nail of the iron bar lay in very close proximity to the current, and this bar alone was conducting the electricity, for touching the other bars did not produce a shock.

The horse had touched the bars with his head, especially when eating eagerly, and had thus received electric shocks. On that account the symptoms were shown especially at that time of the year when the days were short and feeding had to be done by artificial light. At midday and in the summer, of course, the electric light was not used.

The author thinks himself justified in concluding that the very repeated irritation of the electric shocks had finally caused an alteration in the nervous system which manifested itself in the form of "sleepy staggers." He notes, however, one point in which the symptoms differed from those generally seen in "sleepy staggers." Instead of the slight sensitiveness to pain usually associated with that condition, there was in this case a pronounced hyperæsthesia. The author says nothing of the subsequent history of the horse.—(*Berliner Tier. Woch.*)

Tuberculosis in Goats.

In the year 1912, in the Institute for Animal Hygiene in the University of Freiburg, two cases of caprine tuberculosis were observed, and have since been reported in detail by Prof. Schlegel. One was a case of open pulmonary tuberculosis, and the other one of advanced generalised tuberculosis.

In the first case, the lobes of the right lung contained numerous pale yellow, caseo-calcified nodules from the size of a pin's head to that of a bean. The lobes of the left lung contained grey-yellow nodules of from hazel-nut to pigeon's egg size, which, when sectioned, revealed a white-yellow, cream-like, greasy disintegrated mass. The latter had undergone cavernous softening peripherally and was enclosed by a smooth grey-white capsule. In places this was ruptured, and the lesions had opened into the bronchi. The trachea and bronchi were filled with a muco-purulent secretion, in which tubercle bacilli could easily be demonstrated. The bronchial and mediastinal lymphatic glands were enlarged, and contained tuberculous centres.

In the second case, there was an advanced generalised tuberculosis in the lungs, liver, and kidneys of a cachetic seven-year-old goat. All the lobes of the lungs were beset with countless grey-white caseo-calcified tubercles of from pin's head to chestnut size. Some of the bronchi had been broken into by caseous caverus. The liver showed many dozens of grey-yellow tubercles of from pin's head to pea size with fibrous capsules and caseo-calcified removable cores, the latter point differentiating the lesions from tubercles of other domestic animals. The cortex of one kidney showed one hazel-nut-sized tubercle and one lentil-sized, in the neighbourhood of which were many doxens of submiliary nodules. The lymphatic glands of the lungs and liver showed corresponding tuberculous lesions. Tubercle bacilli of the bovine type could be demonstrated in great numbers.—(*Berliner Tier. Woch.*)

The existence of "Tuberculides" in Cattle.

Perard and Ramon have reported some peculiar lesions which they have observed post-mortem on different occasions in three cattle (*Revue Vét.*). The lesions took the form of numerous rounded or oval nodules, isolated or confluent, of various sizes up to that of a nut. They were situated in the subcutaneous connective tissue and sometimes penetrated between the fibres of the superficial muscles. Their substance was homogeneous, their consistence was somewhat fibrous, and their colour was dull yellow or greenish-yellow.

Bacteriological and histological investigations showed these lesions to be tubercular in nature. They are comparable to the group of lesions known in human medicine as "tuberculides." It seems that in cattle, as in man, these cases indicate a tuberculosis of an attenuated virulence.—(*La Clinica Veterinaria*).

W. R. C.

AVIAN TUBERCULOSIS.

C. H. Higgins and A. B. Wickware, Biological Laboratory, Ottawa.

It was only within comparatively recent times, slightly over a decade, that tuberculosis as a disease has been observed among fowls in Canada. The affection had probably existed for many years, but its true nature and significance was not recognised until diseases of poultry commenced to attract the attention of workers in comparative pathology. Even up to the present time, the importance of the conservation of domestic fowls is scarcely realised, and apart from the purely technical considerations of the diseases which they may contract, very little thought has been exercised as to how the fostering of the industry will affect our domestic economy.

Theoretically, poultry offer one of the best investments for capital, but the losses are so great that the theoretical estimate may be discarded. Once tubercular disease makes its appearance in a flock, the aggregate losses are large although a great number of birds do not usually die at one time. The general unthriftiness of the fowls renders them unsuitable for table use, and the non-production of eggs makes the industry very unprofitable as well as discouraging to the poultry owner.

As avian or fowl tuberculosis, viewed from a causative standpoint, is almost identical with the disease as found in human beings and bovines, it is imperative that further research work be conducted in order to establish, if possible, its exact relation as a source of infection for other animals and man.

Mohler and Washburn, of the United States Bureau of Animal Industry, have reported the transmission of avian tuberculosis to mammals by the direct feeding of diseased organs, and also the infection of guinea-pigs by artificial inoculation with the whites of eggs from affected fowls.

That there is considerable variation in the morphology of the causative organisms found in the different forms of tuberculosis cannot be disputed, but extensive investigations have shown that even these apparently specific characteristics can be altered by artificial cultivation upon various laboratory media and also by growth in the tissues of different animals.

The fact that avian tuberculosis is transmissible to mammals, and the mammalian type communicable to human beings, serves to substantiate the theory that changes may occur in the human host whereby the avian and bovine types of organism may undergo transformation into the human type.

Recent statistics show that the bovine type of organism was present in 90 per cent. of cases of cervical adenitis (enlarged glands of the neck) occurring in children in the vicinity of Edinburgh, infection probably arising through the consumption of non-pasteurised milk. As these and many other cases of human tuberculosis have been traced to infection through the medium of raw milk it is only natural that one should question the possibility of transmission of this insidious disease through the medium of raw eggs. This assumption does not seem unreasonable in view of the fact that raw eggs form the principal article of diet for invalids and individuals whose natural resistance may be lowered and whose systems are impoverished from any one of a number of causes.

Himmelberger, of the Michigan Agricultural College, has recently succeeded in transmitting avian tuberculosis to a bovine, in which latter he obtained a reaction with avian tuberculin although unable to elicit a response when using the bovine tuberculin.

During investigations conducted at this laboratory throughout the past two years, our attention has been chiefly directed towards the microscopic detection of tubercle bacilli in eggs, the infection of experimental animals with these eggs, and the perfecting of a method of diagnosis whereby latent and incipient cases could be identified.

The possibility of congenital tuberculosis being present in chicks has been given considerable attention but our experiments in this connection have thus far given only negative results. Eggs from tuberculous fowls have been artificially incubated and the chicks immediately transferred to new quarters where special precautions were taken to prevent infection from outside sources. The most careful autopsies, however, failed to reveal lesions of tuberculosis, while cultures from splenic tissues gave negative results.

The demonstration of acid-fast organisms in eggs was also undertaken and in nearly 20 per cent. of the latter, bacilli microscopically indistinguishable from tubercle were found to be present. The subsequent inoculation of guinea-pigs with material from these eggs produced a generalised tuberculous infection, from which typical avian cultures were procured.

The prevalence of avian tuberculosis throughout Canada is, every year, becoming more apparent. This is evidenced by the fact that inquiries from widely separated sources are, from time to time, received at the laboratory concerning this affection. In the fall of 1913, while on an official trip, one of us had the opportunity of visiting a locality where large numbers of poultry were being lost. On making inquiries, the information was that the farmers in the vicinity had been losing immense numbers of fowls, for which no cause could be assigned. Autopsies on several hens revealed the affection to be tuberculosis and, on one farm, a clinical observation showed several to be suffering from lameness which was apparently tubercular in nature.

SYMPTOMS.

The causative organism or germ of tuberculosis gains entrance to the system, usually with the food, and finding a favourable location grows and extends to the various tissues. This growth of the germ induces symptoms of unthriftiness, and this unthriftiness is followed sooner or later by death. The detection of tuberculosis from the symptoms is not always easy. Some may be observed to be "going light," yet they are seen to be good feeders. If picked up it is found that the flesh has almost entirely disappeared from the breast bone, and this should make one suspicious that something is wrong. A yellow or greenish diarrhœa is frequently present in affected birds and, where this is present the type of disease is most dangerous to the remainder of the flock, as the germs are to be found in the droppings in immense numbers.

One of the most frequent symptoms seen early in the course of the disease is lameness, a result of the infection involving a joint of the leg. Lameness is mentioned by persons forwarding fowls for diagnosis more frequently than any other symptom where our subsequent examinations have proven the trouble to be due to tuberculosis; so that we are at once suspicious of tuberculosis whenever the symptom is mentioned.

Fowl affected with tuberculosis may die in a few days from the first appearance of symptoms, or they may linger for weeks, gradually becoming more emaciated as the disease progresses, until they die from exhaustion. The progress is largely dependent on the strength of the invading germ and the natural resistance of the bird. Some outbreaks of the disease follow a more rapid course than others; usually, however, the course in an individual extends over weeks, and sometimes months may intervene before death takes place.

POST-MORTEM FINDINGS.

The post-mortem findings in fowl tuberculosis, when considered in relations to the symptoms and general history, are characteristic. The liver is usually the

principal organ affected, and there are lesions from the size of a pin point to that of a large pea, which are white or yellow in colour. The larger lesions when cut into give a gritty sensation as the knife passes through them. These lesions are distinct from the liver tissues and may be quite easily separated from the liver itself. In the more acute cases the liver may be greatly enlarged, even to twice its normal size. This enlargement in chronic cases is noticeable. The spleen is usually involved, the lesions having the same characters as mentioned for those in the liver. The enlargement of the spleen is usual, and it may be four times its normal size. The intestines may or may not be involved. When lesions are present we find nodules from the size of a small pea to that of a medium-sized nut. The minute dissection of these usually presents a free opening into the inside of the bowel, and at this point of entrance there is an ulceration. It is through this opening from the nodule on the intestine to the interior of the bowel that the bacilli gain access to and are so easily distributed by the droppings.

Other visceral organs are seldom involved. It is frequently observed that the joints, notably that of either or both hips may be the seat of tubercular ulcerations. Such an ulceration is the cause of lameness during life.

The affection has also been observed in canaries, lesions having been demonstrated in two birds autopsied by one of us at the Pathological Laboratory of Queens University, during the past winter. These birds were obtained as domestic pets from a dealer in Toronto, and shortly after being received showed clinical manifestations of a respiratory affection, death taking place in the course of a few weeks. Gross lesions were present in nearly every organ, and microscopic examination showed myriads of acid-fast bacilli of the avian type.

We have observed the disease in turkeys in a number of instances. In one instance, when a turkey was affected the history seemed to indicate the possibility of its having been transmitted from a bovine source. We were unable, however, to follow this up and absolutely determine this possibility.

PREVENTION AND TREATMENT.

In the prevention of tuberculosis and other infectious diseases of fowl sanitary surroundings, with plenty of sunlight and fresh air are requisites of prime importance. In our opinion, these features are best obtained by the use of the modern cotton-front house, a number of types having been described by various poultry authorities.

The best means of preventing and treating tuberculosis in fowls is to destroy the entire flock if all have been running together, and to thoroughly cleanse and disinfect the quarters which they have occupied with any good disinfectant, one of which is a 5 per cent. solution of crude carbolic acid. This may be made by adding two teacupfuls of crude carbolic acid to a pail of hot lime wash. This should be applied with a spray pump, brush, or old broom to all parts of the house occupied by the fowl. This method of disinfection is suggested, owing to the fact that in tuberculosis or consumption in fowls, as has already been indicated, the bacilli or germs are found in the droppings in great numbers, and these should be destroyed. This action is further recommended as it has been shown that fowls, dead of tuberculosis, if eaten by hogs communicate the disease to them, and it is probable that the droppings would also communicate the disease in a similar manner.

When destroying the birds after it has been demonstrated that tuberculosis is present, some may be suitable for food if an examination of the livers shows no yellow or white spots from the size of a pin point to that of a pea, and there are no nodules or lumps on the intestines. When these lesions are present the flesh connot be considered suitable for human food.

We have found that eggs from tuberculous fowls may contain the bacilli or germs in the white, and we, as well as others, have demonstrated that they are in sufficient numbers to infect small experimental animals.

This suggests a possible source through which tuberculosis may be introduced into a flock, namely, by the unsuspecting purchase of eggs from someone who has tuberculosis among his fowl.—(From *Report of Vety. Director-Genl., Dept: of Agric: Canada*).

LINCOLNSHIRE AND DISTRICT VETERINARY MEDICAL SOCIETY.

[NATIONAL V.M.A.—SOUTHERN BRANCH.]

The annual meeting was held at the Angel Hotel, Grantham, on Thursday, February 10th, Mr. T. Holmes (Vice-President), in the chair. Others present were: Messrs. T. A. Rudkin, Grantham: R. W. Knowles, Wisbech; Edwd. Porter-Smith, Lincoln; and T. Hicks, Sleaford (Hon. Sec. and Treasurer).

The minutes of the previous meeting were passed.

Letters regretting absence were read from Capt. C. W. Townsend, F.R.C.V.S. (President), in France; Messrs. T. J. Keall, F. L. Gooch, G. Lockwood, Capts. H. Westgate and H. Hartley, in France.

From Capt. A. H. Routledge, Louth, resigning his membership owing to absence on military duty. [The resignation was accepted with regret].

Mr. EDWARD PORTER-SMITH, Lincoln, was elected to membership.

A letter was read from the Royal College, thanking the Society for the patriotism its members had shown during the war.

FINANCE.

The HON. TREASURER presented the accounts, which were duly passed, the balance in hand being £38 13s.

It was decided to send two guineas to the Benevolent Fund.

An application for support to the Belgium Veterinary Fund was adjourned to the next meeting.

ELECTION OF OFFICERS.

The officers were re-elected *en bloc* on the motion of Mr. Knowles, seconded by Mr. Porter-Smith.

The PRESIDENT, in his letter from France, expressed the hope that the members would keep the Association going as well as possible until after the war.

It was unanimously decided to send a letter of congratulation to Mr. R. W. Clarke, M.R.C.V.S., of Wragby, on his rescue from a wrecked transport. Mr. Hicks stated that Mr. Clarke was two hours in the Mediterranean clinging to a log.

OAT-HAIR BALL.

Mr. HENRY B. EVE, M.R.C.V.S., Folkestone, sent for inspection an extraordinary oat-hair excretion (dung ball) weighing 3 lb. 15 oz. from a mare, a heavy vanner belonging to the South Eastern Railway Co., and which was at work until he was called in—too late to be of service.

Thanks were accorded Mr. Eve, the Hon. Sec. remarking that they had been indebted to him for interesting specimens in the past.

STRANGLES, AND SOME OF ITS SEQUELÆ.

By T. HICKS, M.R.C.V.S., Sleaford.

FEBRA PYOGENICA. Caused by streptococcus distinct from other streptococci pathogenic to other animals and man.

Habit. Unlike the other pyogenic organisms, this is an obligatory parasite. The disease is always due to contagion and is never sporadic.

Morphological characters. In the form of long chains the streptococci may be seen by the method of Gram, although better by the Gram-Weigert.

Cultural characters. On surface of slanting agar it forms circular colourless colonies. Grows in bouillon as a flocculent deposit at the bottom of the liquid.

Method of Infection. Principally by inhalation; in some cases by ingestion, as it is fairly common to get mesenteric glands affected.

Lesions. Catarrhal inflammation of the air passages; animal probably refuses to take its food, in this case one may be quite certain this is either due to the soreness of throat, or submaxillary and pharyngeal glands becoming affected, when an acute adenitis of any or all of these glands takes place. This suppurative condition either breaks or requires surgical assistance, when a thick creamy pus exudes.

These typical lesions of strangles may be associated with abscesses in other parts of the body, such as the bronchial or mesenteric glands or the brain (through the cribriform plate), and last, but not least, a septicaemic infection may develop.

Period of Incubation. Very short—4 to 5 days.

The name Bastard strangles, or as better called the Irregular form of strangles, is a disease which is caused by the same organism but is manifested in a different manner. The abscesses are found in other parts of the body than the inter-maxillary space, and in many cases it is a sequel to the former. It occurs in an enzootic form and affects animals of all ages, and is, in my opinion, much more virulent.

Symptoms of Strangles (only observed in adolescent animals, because the older animals, from five years upwards, have acquired a certain degree of immunity. Some authorities maintain that the reason why the young horse gets it so readily is on account of the teething process). Staring coat, animal may cough, discharge at the nose and eyes; the following day glands may be inflamed, and according to the glands affected it will hold its head; brick-red mucous membrane of the eye and nose usually. Temperature, 103–106° F.: although the external temperature will be irregular. Pulse, to commence with, will be small and hard, but will quickly become full and bounding. In some cases it interferes with respiration, and in favourable circumstances the enlarged gland appears soft, and may break outside or be lanced by the veterinary surgeon, but it is not at all uncommon for the abscess to break internally and discharge either down the nose or down the œsophagus. I had a case under observation quite recently where a primary abscess developed in the lower third of the neck, adhering to the trachea and œsophagus, and the pharyngeal lymphatic glands did not appear to be affected at all.

Symptoms of Irregular Strangles. These may be manifested in many ways; by abscesses all over the body, particularly the head and neck, or internally. The mesenteric and bronchial lymphatic glands may become affected, or perhaps the brain, through the cribriform plate.

Treatment.

Prophylactic. The use of anti-streptococcus serum can undoubtedly ward off a severe attack, and in bringing young horses into contact with cases of this disease, it should be resorted to immediately the premonitory symptoms are observed.

I notice in various articles sent from the D.G.A.V.C., that he advocates the frequent use of the thermometer, but quite a year previously I had equipped some intelligent grooms in a depôt of which I have veterinary charge with thermometers, and urged upon them the importance of their use.

In the ordinary treatment—mustard and water applied to the glands of the throat and neck and breast, where possible, get the animal in a warm but airy place, and rug and bandage. Encourage the animal to feed and drink off the ground wherever possible, as it induces the abscesses to form lower down, *i.e.*, in the intermaxillary space, whereas if a horse is tied with his head always well up, I have frequently noticed the parotid glands on either side affected, with large abscesses high up immediately beneath the base of the ear, and these take longer to cure than the lower abscesses, on account of being less able to get efficient drainage.

It is not always possible to remove into the ideal roomy box, but on the contrary, animals have to be left in the open. I would not have believed it possible to have favourable results from such procedure, but have had a fair experience with a great number of horses with strangles under such circumstances. Well rug and bandage if possible. When abscess breaks or has been lanced, thoroughly cleanse the cavity with a syringe and antiseptic; this, of course, is most important. Finally wash out with a solution of Iodine.

I use anti-streptococcus serum in obstinate cases at intervals of 3 to 5 days. Electuaries seem to be the best method of administering medicines, and they should contain any or all of the following:—Pot. chlor: Pot. nit: Quin. sulph: Boracic acid: Belladonna extr: Pulv. scillæ: Pulv. glycyrrhiza: Glyco-heroin: Treacle or honey: Pulv. digitalis: Camphor.

I always give horse during the first three days when temperature is high—acetanilin ʒii morning and evening in drinking water, or in food.

In chronic cases I have had very good results from the daily administration of K I in ʒii doses in drinking water.

In a septicæmic case where the temperature kept up for four months after the attack, though the animal had a fair appetite but did not improve in condition, but soon got more emaciated. I gave streptocine and balls containing: Quin. sulp. ʒss; Ammon. carb. ʒii; Ferri carb. ʒii, night and morning. I could not keep the temperature down until I added the above dose of K I daily, and in ten days it had the desired permanent effect. I further consider it will prevent a case of Strangles developing into Purpura hæmorrhagica.

When to use Pot. chlor. or boracic acid must depend on the case. If throat is very sore and deglutition difficult I generally use boracic acid only, and when possible steam the head, or failing that, poultice the throat.

Purpura Haemorrhagica (Petechial Fever).

I do not propose to enter very fully on this disease as it would occupy too much time.

The principal features are bloodstaining of the mucous membrane and swelling in dependent parts of the body. It occurs in isolated cases, and usually follows some debilitating fever, such as strangles, influenza, contagious pneumonia. It is a late sequel, and not often a complication. It is not a contagious disease. It is caused by micro-organisms or their products.

In all probability it is favoured by inefficient ventilation and bad drainage.

Blood staining of the nasal mucous membrane in the form of petechiae which gradually become confluent is a prominent feature.

Probably a little blood-tinged discharge may be seen coming from the nose. Swelling of the limbs, particularly the hind; loss of appetite and vigour; swelling of the head (abdomen in some cases) to enormous size which have a peculiar "tieing in" feature. It is not painful, and eventually one will see an exudate oozing through the skin as the disease advances. Skin may slough off, although I have never experienced it.

Treatment. Get into roomy box and see to drainage. Some say leave the swellings alone, although I prefer to dab them with either white lotion or vinegar.

Intra-tracheal injections of K I in ʒi doses two or three times a day. Dieckerhoff's solution is a very convenient form for those who favour intra-tracheal injections: I. 1 part; K I, 5 parts; H_2O, 100 parts.

Some use Pot. chlor. and Tinct. ferri perchlor. Well rub and bandage the abdomen with blankets.

In the case of the swelling of the head be ready to perform tracheotomy, although I have known Boracic acid given in an electuary work wonders in these cases. Give K I in ʒii doses night and morning in drinking water, with plenty of thick gruels during the worst stage of the disease. Steam the head frequently.

In my last two cases I used streptocine directly I discovered my patient had the disease, and I consider that it prevents a case from developing into the extremes we have known before we adopted its use.

Messrs. Holmes, Knowles, and Porter-Smith took part in the discussion on the points raised by the paper. A vote of thanks was accorded the Essayist.

This concluded the business of the meeting.

T. Hicks, Hon. Sec.

County Magistrate and the Swine Fever Order.

At the Faversham County Petty Sessions on Thursday, Feb. 3, before Lord Harris (in the chair), and other magistrates, Mr. Walter Wheeler Berry, J.P., of Gushmere, Selling, was summoned for failing to notify with all practicable speed the presence of swine fever on his farm at Selling on January 11th, and that being the owner of a boar used for service other than his own, he did not keep a register as required under the Swine Fever Order, on January 14th. Frank Clackett, his stockman, was also summoned for receiving at Dane Farm a sow without a licence, on January 13th. A plea of guilty was entered in each case.

P.C. Featherstone stated that on January 11th, owing to information received anonymously he visited Poppington Farm, Selling, where he saw two dead pigs and fourteen other pigs, which seemed ill. He also visited Gushmere Farm and found two other pigs dead there, and he reported the matter to the Board of Agriculture by telegram. He subsequently saw Mr. Berry and served the notice closing Gushmere and Poppingham Farms. When he told Mr. Berry that two pigs had died at Gushmere he said, "When they died I thought it was due to food causing irritation of the bowels, and I had 16 of the pigs shifted to Poppington as they would be cooler than on the hot manure." Witness told him he also found two dead ones at Poppington, and defendant said, "That is news to me." On the 12th Mr. Morgan examined the pigs and ordered him to serve notice closing Dane Farm, where he found 49 fat pigs, 11 sows and two boars. On visiting this farm on the 14th January he found a sow belonging to Mr. F. Neame, of Macknade, had been placed with the boar there, and that the sow was brought there the day following the service of the notice.

Mr. Berry stated it was reported to him on leaving home on the morning of the 12th that two pigs had died. He enquired the symptoms, and he was sure in his own mind that they were similar symptoms his pigs had before. He fed a large number of pigs and and never had a case of swine fever. It had been impossible to get food suitable for young pigs, and he was certain that as they had had a preponderance of potatoes in their food it had caused diarrhœa. It was, of course, a distinct error of judgment and he ought to have sent for his veterinary surgeon. As the Bench knew, he had been associated with the Board of Agriculture for many years, and it had always been his desire to obey every order. With regard to sending the sow to Dane Farm it was a pure accident as it arrived after the order was given. He did not keep a boar for service outside his own pigs, but in this instance he agreed to take the sow to oblige Mr. Neame, who was in a difficulty. As the sow had not gone away again he submitted that it was not necessary to have a register. It was a satisfaction to him to know how thoroughly the police and the veterinary surgeon had carried out the matter.

Clackett told the Bench that he never thought a word about the closing order until it was too late.

Superintendent Lawrence proved two previous convictions under the Diseases of Animals Order.

Mr. Berry said he had received £9 from the Board of Agriculture for the slaughtered pigs, which was half their value.

Lord Harris, addressing Mr. Berry, said it was distressing to him to have to address him from that Bench, and they did not hesitate to accept his statement that he had not acted wilfully in the matter. He took it that with his long experience of farming and keeping pigs Mr. Berry trusted to his own method of treatment was sufficient, but where a person of experience and self-confidence took it upon himself to take the risk of something happening that he did not expect he had to bear the penalty. They all ran the same risk as farmers. The Bench could not help regarding this as a serious case as two or three farms were concerned and there was a movement of animals. Though it was the first case of the kind they could not ignore the possibility that this disease, very tiresome and expensive to the county, might have been spread by the defendant's self-confidence that it was not swine fever. In the first case he would be fined £1 11s. 3d. per pig, making a total of £25 and special costs of 26s. The other two offences they considered were quite technical and there would be a fine of 5s. in each.—*The Faversham Mercury.*

Alleged Cruelty—dismissed.

At Tregaron Petty Sessions, on the 8th inst., before D. J. Williams, Esq., Chairman; Dr. J. Morgan, Pontrhydygroes; the Rev. T. R. Davies, Llanddewi-brefi; R. R. Rowland, Garth; Evan Evans, Tynewydd; and D. J. Davies. Ysbytty, Esqrs., Moses Williams, farmer, Llwyngoronwen, Pontrhydfendigaid, was charged by Walter T. Laird, inspector of R.S.P.C.A., Newtown, with having ill-treated a horse by travelling it in an unfit state. Hugh Jones, farmer, Bwlchyddwyallt, was also charged with having caused the horse to be travelled. Mr. William Davies appeared for the defence.

P.S. David Jones gave evidence that on Saturday evening, January 8th, about half-past five, he saw Moses Williams leading a black mare on the highway, near Trecefel Farm. He noticed the mare walking lame and in pain. He stopped defendant, examined the mare, and found the near foreleg quite stiff with a large swelling on the knee and the lower part of the leg bent inward. The mare moved with a hop and was unable to put any pressure on the bad leg when it was on the ground. In fact, the mare moved on three legs. The condition of the mare was such, in his opinion at the time, that it would be gross cruelty to allow defendant to proceed any farther, and the mare was turned into a field adjoining Trecefel Farm. Defendant told him he bought the mare that day from Hugh Jones, Bwlchyddwyallt, and brought the mare from there that evening, a distance of four miles. Defendant offered to have the

mare killed there and then if witness promised not to say a word about it. According to statements made by defendant, the mare was sold for 10s., the value of its hide, and had not been worked for the past three years. Moses Williams had not carried out his promise to kill the mare.

Inspector Laird gave evidence that on Friday, Jan. 14th, accompanied by P.S. Jones, he saw the animal on Trecefel land. It was a black mare, very old, and in low condition, very lame on the near foreleg. The leg was bow-shaped, the knee was enlarged to the size of a small football, and locked with bone instead of ligament. The back tendons were contracted and, though the animal had been turned out for a week, there was still inflammation in the knee joints and tendons. The off foreleg was normal. The animal was worn out, and only fit to be slaughtered. It had not been shod for some time.

Robert Henderson, M.R.C.V.S., giving evidence for the defence, said he examined the mare that morning. The lameness of the near foreleg was due entirely to chronic enlargement of the knee and, of course, the enlargement caused stiffness. The mare was absolutely free from pain and there was no inflammation, the lameness being old standing, and there was no wound. The mare was unable to work, but could walk on the road.—Cross-examined: He thought the animal was in the same condition a month ago. He was surprised to hear there was inflammation. There was nothing wrong with the tendons. He was told that the mare was in foal, and was therefore worth more than its hide.

The Bench intimated that they did not wish to hear further evidence and dismissed both charges.—*The Cambrian News and Farmers' Gazette.*

An Unclean Milk Case at Bradford.

At Bradford on 10th inst., Lister Woodhead, farmer, of 50, Smith Road, was fined 20s. for failing to exercise due diligence to prevent contamination. It was alleged that, although an inspector had pointed out to the defendant that the udders of two of his cows were defective, defendant had sold milk from those cows, and the samples showed the presence of pus, an inflammatory discharge which was liable to create serious illness in persons, especially young persons taking the milk.

Defendant said he had never sold any of the milk from the defective cows, and maintained that the swelling on the udders had been caused by a bruise, and not by a cold. The lump had been three times as large as it was when the inspector saw it, but he (the defendant) had got it down by constant attention. He had been at his present address for eight years, and had never had a complaint made against him before.—*The Yorkshire Post.*

Seaweed for Horses.

The passage in Plutarch which refers to the use of seaweed as food for horses will be familiar to some of my readers. Cæsar's army at Thapsus, after defeating Scipio and Juba, was short of food for the animals, and mixed seaweed with grass to supply the deficiency. Germany, it seems, is carrying out experiments with the object of doing the same thing. Farmers have from time to time made use of seaweed for cattle, and it is well known that it is in some parts of the country served up for human consumption. According to a German journal, if seaweed is rapidly dried it loses all taint of salt, and it may be ground like corn, although not so small, for it has to be moistened with water and allowed to swell. "Chemical analysis shows that seaweed in this condition possesses a greater proportion of protein and fatty substances than plants of a similar nature, though less mineral elements. A mixture of seaweed, rye, and potatoes in the proper proportions would make an excellent fodder for cattle, and perhaps also for sheep-dogs.—*Horse and Hound.*

The Royal Sanitary Institute,

90 Buckingham Palace Road, London, S.W.

A discussion will take place on Thursday, March 9th, at 4.15 p.m., on "Food Inspection, Standards of Purity for Food Supply in War-time, and the Utilisation of Condemned Stores." To be opened by J. Wright Mason, M.B., D.P.H. (Medical Officer of Health, Hull). The Chair will be taken at 4.15 p.m. by Sir William J. Collins, K.C.V.O., D.L., J.P., M.D., M.S. (Vice-President). The following speakers have consented to take part in the Discussion:—R. King Brown, M.D., D.P.H., M.O.H., Bermondsey; W. J. Howarth, M.D., D.P.H., M.O.H., City of London; H. R. Kenwood, M.B., D.P.H., M.O.H., Beds. C.C. and Stoke Newington; W. Perrin Norris, M.D., D.P.H., Chief Medical Officer, Australian Commonwealth Medical Bureau; Samuel Rideal, D.Sc., F.I.C., J.P.

Nomination to Council R.C.V.S.

P. Wilson, M.R.C.V.S., Lanark; nominated by Dr. O. Charnock Bradley; F. W. Garnett.

Donations to R.C.V.S.

The Secretary of the Royal College of Veterinary Surgeons begs to acknowledge the receipt of the following donations for 1916 to the College funds:—

Mr. W. Turtill, Wickham Market	£1	1	0
Mr. P. C. Woolston, Bedford	1	1	0
Mr. H. Bibbey, Winsford	1	1	0
Mr. A. Over, Rugby	1	1	0
F.R.C.V.S.	1	1	0
Mr. R. W. Knowles, Wisbech	1	1	0
Amount previously acknowledged	14	14	0
	£21	0	0

ARMY VETERINARY SERVICE

War Office, London, S.W.

Extract from *London Gazette*,

War Office, Whitehall, Feb. 11.

Regular Forces. Army Veterinary Corps.

Temp. Lieuts. to be temp. Capts.:—G. W. Dunkin (Feb. 1); W. H. Power (Feb. 2).

Temp. Lieuts. relinquish their commns. on termination of their engagements:—F. J. Delaine, A. Seim (Feb. 5).

Feb. 14.

To be temp. Lieut.:—W. S. Inglis (Feb. 1).

To be temp. Qrmr., with hon. rank of Lieut.:—A. H. Webber (Feb. 15).

Feb. 15.

Temp. Lieuts. to be temp. Capts.:—J. H. T. Kenyon (Jan. 4); W. P. Stokes (Feb. 4).

To be temp. Lieut.:—T. O'Connor (Feb. 1).

The A.V.C. Comforts Fund.

Collected by Mrs. Mettam, Royal Veterinary College, Dublin, in aid of Mrs. Moore's Comforts Fund :—

per Jas. V. Daly, M.R.C.V.S., Dublin :						
J. Balmer, Ballymena	£2	0	0			
H. Boal, "	1	0	0			
— McAldin, Banbridge	1	0	0			
				4	0	0
M. Quinn, Dublin	2nd don.			10	0	
R. H. Lambert, "	"			10	0	
A friend				10	0	
F. Talbot, Tuxford	"			1	1	0
O. D. Neary, Ardee	"			1	0	0
per E. C. Winter (F.), Remount Depot, Newport News, Va., U.S.A. :						
E. C. Winter (F)	£4	4	0			
A. Gillespie, D.V.M.	2	2	0			
F. X. Maguire, D.V.M.	2	2	0			
J. King, V.S., Carlyle, Saskatchewan	2	2	0			
				10	10	0
				£18	1	0

Previously acknowledged £354 14 0

Miss Jessie Evans, Kingston-on-Thames, per N. Almond (F.) : 2 helmets, 2 prs. mits. 1 body belt (2nd don).

Mrs. H. Begg, Hamilton, Lanark : 1 pr. socks, 1 muffler (2nd don.)

J. Ewing Johnston, Belfast (3rd con.) : 2 mufflers, 1 body belt, 3 pr. cuffs, 1 pr. mits., 7 pr. socks, 3 wither pads. 1 knitted waistcoat, 1 muffler, 3 pr. mits., 3 pr. socks (4th con.).

Mrs. McChee, Hamilton, Lanark (per H. Begg (F.) : 1 muffler, 1 pr. socks

Mrs. T. M. Inglis, Forfar : 6 pr. socks, 1 muffler, 1 helmet, 2 pr. cuffs, 12 pkts. cigarettes

The Lady Mayoress and ladies of the Belfast Branch of Queen Mary's Needlework Guild, per J. Ewing Johnston : 30 pr. socks, 12 mufflers, 9 pr. mits., 4 helmets

Mrs. J. George, Magherafelt (2nd con.) : 1 muffler, 2 helmets, 1 pr. socks

Mrs. K. J. S. Dowland, Hawick, N.B. : 3 pr. mits, 6 pr. cuffs, 1 pr. socks

Personal.

LEESE—KING. On the 10th Feb., 1916, at St. Jude's, Southsea, by the Right Rev. Bishop Ingham, Arnold Spencer Leese, Captain A.V.C., second son of the late Spencer Leese, of Southport, and of Mrs. Spencer Leese, of North Finchley, N., to May Winifred, youngest daughter of W. H. King, P.W.D., India, retired, and of Mrs. W. H. King, of Southsea.

BROWN.—On the 4th January, at 31 Eagle Road, Wembley, to the wife of Esmond Brown, M.R.C.V.S., twin sons.

MASSON.—On the 14th inst., at Bannercross Abbey Road, Torquay, to the wife of Charles Masson, a daughter.

The Board of Agriculture have made an Order defining the pier at Whale Island, Portsmouth Harbour, as a foreign animals quarantine station for the specific purpose of the landing of the animal described in a schedule annexed—namely, "one pig at present on board H.M.S. Carmania."

OBITUARY

JOSEPH WOODS, M.R.C.V.S., Kirkham, Lancs.
1880 ; Graduated, Edin. : April, 1880.

Mr. Woods died on February 10th, aged 59 years.

WALTER SMITHERS, M.R.C.V.S., Dorking, Surrey.
Lond. : January, 1883.

Death occurred on February 14, after a short illness, in his 57th year.

CORRESPONDENCE.

VOLUNTARY SUBSCRIPTIONS TO THE R.C.V.S.

Your remarks on the above in last Saturday's *Record*, are timely and to the point.

It is no use harping on the old half-guinea string, but I feel sure if the Council had asked for that sum in their Bill, they would have got it long ago, and could have saved £1000 a year all these years.

The proposal now is to economise at the expense of efficiency. At the present time the country is over-run with quacks—and quackery is spread broadcast. (The contents of a bottle of medicine supplied by one of these men, and sold at 2s. were, on recent analysis, found to be worth one-twentieth of a penny). If the Council carry out their economic proposal, the result will be that they will let loose a number of semi-qualified quacks.

Another retrograde proposal of the first importance is to have one examiner for each section of the four classes with the professors of the various schools over them. A man of merit and mettle, I imagine, would not act as examiner under these conditions.

I do not see that it is necessary for the Council to issue an appeal for funds. The Treasurer has done so, and, like a man, has shown an example by subscribing, which not one of his colleagues has done, and so long as they refuse to subscribe, many members will follow their example, including—Yours, etc.,

X. Y. Z.

INSURANCE COMPANY'S FEES.

Dear Sir,—The enclosed letters may be of interest to you. You will find my reply on the one dated Feb. 2nd.

Yours truly,

88 High Street, Stourbridge, 3rd Feb. JAS. BLAKEWAY, Senr.

ACCIDENT BRANCH,
NORWICH UNION FIRE INSURANCE SOCIETY, LIMITED.

Birmingham, 26th January, 1916.

Messrs. J. Blakeway & Sons,
Veterinary Surgeons, Stourbridge.

Dear Sirs,

W. H. Aston, Lye Saw Mills, Lye, Stourbridge.

I have received a proposal for the Insurance of three horses and a mare, the property of the above, and should be very much obliged if you would kindly examine the animals on our behalf, and let me have your report upon the attached form at your early convenience.

On receipt of same, I shall be pleased to remit you the amount of your fee.—Yours faithfully,

H. R. HOWELL, Manager.

Birmingham, 2nd February, 1916.

Dear Sirs,

I shall be glad to learn whether you have yet examined the animals, *viz.*, three horses and a mare, belonging to the above, as requested in mine of the 26th ult. If so, I shall be glad to have your report on their condition.

Yours faithfully,

H. R. HOWELL, Manager.

[Copy of letter.]

Dear Sir,—In reply to your two letters *re* horses of Mr. Aston, Lyz—I think it a gross piece of impertinence on your part to offer such fees to a Vet. Surgeon, and any M.R.C.V.S. who undertakes work for such fees must be very hard up for a job.

The information required by the Society is:—

Sex or species. Name. Colour, distinctive marks, and Stud Book number (if any). Age (rising). Height: hands, ins. Market value, £. Any special remark.

For what purpose are the horses used? Are the stables in good sanitary condition? Are the Horses in your opinion sound, healthy, and free from vice? Are they well kept and in good condition? Are any of them unfit to insure? If so, indicate them and give your reasons. Which of the Mares are in foal, and do you think they will foal safely? If any of the above Mares have never foaled before please name them. Are any of the animals subject to gripes or any other disease? If so, give particulars, Do you recommend the Society to accept the proposal?

I have examined each of the animals described in the above Schedule, and certify that the particulars and values given are correct.

Signed *M.R.C.V.S.*

Please state distance of Assured's Stables from Surgery.

Scale of Fees. For the Inspection of One Horse, 4/. Two Horses, 3/- each. Three to Ten Horses, 2/6 (Max. £1 1s. 0d.) Ten to Twenty Horses, 2/- (Max. £1 11s. 6d). Over Twenty Horses, 1/6 (Max. £2 2s. 0d.)

A mileage of 6d. per mile one way is allowed after the third mile.

The Treatment of Mules.

Mr. Cecil Chapman sends to the *Times* an extract from an Army Officer who has been dealing with the mules bought for use at the Front. It indicates that the much-abused animals can be successfully managed if well treated. The writer says: "You asked me to tell you about our mules. We have fifty of them, and they have been with us since March last. We did not look forward to them at all. The truth is, not one of us knew anything about them, and I came across no one at the time who did. Our men, many of them unaccustomed to animals of any kind, were frightened of them. They arrived at night, and led us a real dance. They had just come from America, and were thoroughly upset by their voyage and many handlings. Many, of course, were entirely unaccustomed to harness or to being ridden, and all were in very poor condition. Many were unshod, others were shod on forefeet only, and all were covered with lice. One man was savaged, and several were kicked on the first day, but I made up my mind to try nothing but kindness in dealing with them. I have never allowed a twitch to be used, or a mule to be hardly treated by beating, nor have I allowed them to be put in stocks when being shod. Kindness has paid in a wonderful way. Our mules let us do what we like with them. There are still one or two timid ones, but we have no difficulty in harnessing, shoeing, or handling, and they are the most willing and sensible of beasts, except when they are up against a load which they cannot move, and in that case they jib. I have always fed them on maize in preference to oats, because it is the food they were brought up upon in Argentina, and I have had no disease of any kind. Indeed, I was congratulated the other day in having the best conditioned mules in the division, not a poor one amongst them, in spite of the hard work which a field company under present conditions finds for them to do."

Perth Horse Case.—Auction Sale.

In the case of Hamilton *v.* Dunbar, an appeal was taken to the Sheriff-Principal of Perth, who has reversed the decision of the Sheriff-Substitute. Sheriff Johnston's interlocutor is as follows:—

Perth, 27th December, 1915.—The Sheriff sustains the appeal, recalls the Sheriff-Substitute's interlocutor of 23rd October, 1915; finds in fact—(1) That on 12th February, 1915, there was knocked down to the pursuers at Macdonald, Fraser's Auction Mart, Perth, a brown horse the property of the defenders, and that the pursuers paid to the auctioneers £56 as the price of the horse; (2) that the defenders warranted the horse as being fit for all farm work, and that under the conditions of sale pursuers had three days for trial and rejection as disconform to warranty; (3) finds in law that such a warranty given under such conditions imports that the horse, by health, training, and temperament is fit for all ordinary farm work, and is at the time of sale in a condition to be tried at such work; (4) finds further in fact that on the day following the sale the pursuers proceeded to try the horse in drawing a cart, when it proved unfit for work owing to some affection of the feet and spine, and could not therefore be properly tried; (5) that on Monday, 15th February, pursuers intimated rejection of the horse; (6) that the horse was subsequently exposed by Macdonald, Fraser by mutual arrangement, and was sold for £26, which sum, less the expense of re-exposure, is in the hands of the auctioneers; (7) finds further in law that the defenders are bound to pay to the pursuers the price of the horse and other expenses sued for, less the sum in the hands of the auctioneers, which falls to be paid by them to the pursuers. Therefore decerns against the defenders jointly and severally in terms of the conclusions of the action; finds the pursuers entitled to expenses, allows an account thereof to be given in, and remits the same when lodged to the auditor of Court for taxation and report. (Sgd.) C. N. JOHNSTON.

Note.—In this case I reach a different conclusion from that of the learned Sheriff-Substitute, but on grounds not apparently brought clearly before his mind. It was strenuously argued on behalf of the pursuers, on the strength of the alleged import of a number of English cases, that the catalogue at a sale by auction is to be treated as a written embodyment of the terms of contract, and that it cannot be contradicted by parole as to what took place at the sale. I do not think this is the law of Scotland. In my view a sale by auction is in the ordinary case a verbal contract. No doubt, however, the catalogue is of importance—it is the primary statement by the seller of the offer, and if he chooses to modify the terms he must be careful to make it clear to every offerer that he has done so. He fails, however, in this if, where the article under a certain number in the catalogue has been withdrawn, he conspicuously displays this number upon another and different article for sale. This happened in the present case, and accordingly, if the pursuers had refused to have anything to do with the horse on discovering that it was not "72" as described in the catalogue, they would have been within their rights. It is a more difficult question whether pursuers waived any challenge of the discrepancy. Much importance cannot be attached to the payment of the price by the pursuers. It was in accordance with understanding that in a question with the auctioneers they must pay. But the pursuers also took away the horse resolved just to keep it if it suited. On the other hand, no doubt they made a protest which they did not withdraw, in the view, however, which I take of the matter, I do not require to decide this question. Defenders state that they gave a warranty, and by that warranty

they are bound. That warranty was "fit for all farm work." My view of what such a warranty imported in the circumstances is brought out by the findings in the interlocutor. The sale took place on a Friday. On the Saturday the pursuers tried the horse in the drawing of a cart with a load of 16 cwt. Although the pursuers are not farmers, the drawing of such a load in a cart along a road is part of ordinary farm work. The horse appeared to the pursuers to be unable to draw the load without great distress. They sent for a veterinary surgeon to whose skill and experience no exception can be taken, and the vet. pronounced the horse unfit for work. Upon the Monday, that is within three days, pursuers intimated rejection of the horse. The opinion of the Peebles vet. was confirmed a fortnight later by a Perth veterinary surgeon to whom no exception can be taken. It is true that there is evidence that at earlier and later dates the horse worked satisfactorily. That does not, however, alter my opinion that it is proved that on the three days subsequent to the sale the horse was not fit for work or to be properly tried. If that evidence is to be relied upon, then the horse when it worked satisfactorily was in a different state from that in which Mr. Kerr and Mr. Reynard found it. When they examined it there was more amiss than a certain flatness or narrowness of the hoof, which is all that the witnesses in favour of the horse will allow. It may very well be that about the time of sale the horse's maladies or infirmities, whatever they are, were in an acute cycle from which it rapidly recovered after its return from Peebles. The evidence as to its conduct in the stall goes to support this theory. But whatever the explanation, it was not, in my opinion, at the date of sale conform to warranty which defender admits he gave.—(Intd.) C. N. J.—*The Scottish Farmer*.

How foot-and-mouth was spread in U.S.A.

Following the outbreak which recently caused such losses in this country, the disease was found in twenty-one States inside of three months. One quarter of the outbreaks were traced to inquisitive persons who persisted in visiting neighbours' herds, and so carried the disease. Most of these persons were farmers, not one was a veterinary inspector. In Cincinnati, O., a court injunction had to be taken out against one stock buyer, as it was found that he was carrying the disease from farm to farm, and so his visits had to be stopped. In Illinois farmers made the killing and burying days of foot-and-mouth affected cattle regular holidays. They drove up and tied their horses as close as possible to the graves. One man who wished to be perfectly informed as to the symptoms of the disease, examined the mouths of his neighbour's diseased cattle. Then he went home and examined the mouths of his own cattle to see if they had the disease! They had it all right—three or four days afterwards.—A. S. Alexander in *American Farm Journal*.

The existence of foot-and-mouth disease amongst animals on the premises of the Conty Asylum, Wells, Somerset, was confirmed on Friday last, 11th inst.

The usual precautions were taken to prevent the spread of the disease, and an Order was made prohibiting the movement of animals in a large area surrounding the infected farm.

Board of Agriculture and Fisheries,
11th February.

DISEASES OF ANIMALS ACTS 1894 TO 1914, SUMMARY OF RETURNS.

Period.	Anthrax		Foot-and-Mouth Disease.		Glanders.†		Parasitic Mange. ‡		Sheep Scab.	Swine Fever.	
	Outbreaks (a)	Animals.	Outbreaks (a)	Animals.	Outbreaks (b)	Animals.	Outbreaks (b)	Animals.	(b)	Outbreaks (a)	Slaughtered. *
GT. BRITAIN. Week ended Feb. 12	16	17	1	17	2	6	74	159	8	73	214
Corresponding week in 1915 ...	9	11				1	‡	‡	4	87	354
Corresponding week in 1914 ...	20	23			4	4	93	161	13	62	748
Corresponding week in 1913 ...	15	16			5	7	87	159	11	25	218
Total for 7 weeks, 1916	92	95	1	17	10	32	655	1706	117	541	1694
Corresponding period in 1915 ...	124	140			5	8	‡	‡	96	562	2416
Corresponding period in 1914 ...	137	150			15	38	615	1196	97	360	3299
Corresponding period in 1913 ...	98	100			26	84	599	1339	79	238	2856

‡ The Parasitic Mange Order of 1911 was suspended from 6th August, 1914, to 27th March, 1915, inclusive.

(a) Confirmed. (b) Reported by Local Authorities. † Counties affected, animals attacked :—Kent 1, Suffolk 1, Fife 8, City of Edinburgh 1.

Board of Agriculture and Fisheries, Feb. 15, 1916.

IRELAND. Week ended Feb. 12	...	...	...	...	...	...	Outbreaks 3	19	4	18
Corresponding Week in 1915 ...	...	...	...	...	...	...	1	16	6	68
Corresponding Week in 1914 ...	...	...	...	...	...	...	2	32	7	60
Corresponding Week in 1913 ...	...	...	...	...	...	...	4	21	6	5
Total for 7 weeks, 1916 ...	1	5	...	...	...	...	14	119	25	72
Corresponding period in 1915 ...	...	...	...	...	...	...	8	108	26	183
Corresponding period in 1914 ...	...	...	2	28	...	...	23	180	27	188
Corresponding period in 1913 ...	...	...	...	...	...	...	61	135	34	157

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, Feb. 14, 1916.

NOTE.—The figures for the Current Year are approximate only. * As diseased or Exposed to Infection